

In the Specification:

Please replace the paragraph beginning on page 1, line 3 with the following:

B₁ --The present invention relates to a technique for processing ~~image~~image data and to a technique for performing an image compression process and a decompression process at a higher speed.--

Please replace the paragraph beginning on page 1, line 11 with the following:

B₂ --One of international standards for image data compression is the JPEG (Joint Photographic Expert Group). JPEG adopts the DCT (discrete cosine transformation) method which involves irreversible encoding and the reversible encoding method which involves DPCM (differential PCM pulse code modulation) in a two-dimensional space. The compression of image data according to the DCT method will now be described.--

Please replace the paragraph beginning on page 3, line 2 with the following:

--(Equation 1)

B₃

$$S_{UV} = \frac{1}{4} C_U C_V \sum_{X=0}^7 \sum_{Y=0}^7 (P_{XY} - L_S) \cos \frac{(2X+1)U\pi}{16} \cos \frac{(2Y+1)V\pi}{16}$$

where S_{UV} ($U, V = 0, \dots, 7$) represents DCT coefficients. When the bit precision of pixel data P_{XY} is 12 bits, $L_S = 128$ and, when the bit precision of pixel data P_{XY} is 12 bits, $L_S = 2048$.--

Please replace the paragraph beginning on page 3, line 19 with the following:

--(Equation 2)

$$P_{XY} = \frac{1}{4} \sum_{U=0}^7 \sum_{V=0}^7 C_U C_V S_{UV} \cos \frac{(2X+1)U\pi}{16} \cos \frac{(2Y+1)V\pi}{16} + LS$$

Please replace the paragraph beginning on page 4, line 9 with the following:

--(Equation 3)

$$F_U = \frac{1}{4} C_U \sum_{X=0}^7 f_X \cos \frac{(2X+1)U\pi}{16}$$

Please replace the paragraph beginning on page 4, line 16 with the following:

--(Equation 4)

$$f_X = \sum_{U=0}^7 C_U F_U \cos \frac{(2X+1)U\pi}{16}$$